

FUTURE FISHERIES IMPROVEMENT PROGRAM GRANT APPLICATION

Please fill in the highlighted areas

all sections (IA, IB, IC, etc.) must be addressed or the application will be considered invalid

I. APPLICANT INFORMATION

A. Applicant Name: Bitter Root Irrigation District

B. Mailing Address: 1182 Lazy J Lane

C. City: Corvallis State: Montana Zip: 59828

Telephone: 406-961-1182 E-mail: bigditchone@gmail.com

D. Contact Person: John Crowley

Address if different from Applicant: 1182 Lazy J Lane

City: Corvallis State: Montana Zip: 59828

Telephone: 406-961-1182 E-mail: bigditchone@gmail.com

E. Landowner and/or Lessee Name
(if other than Applicant): _____

Mailing Address: _____

City: _____ State: _____ Zip: _____

Telephone: _____ E-mail: _____

II. PROJECT INFORMATION*

A. Project Name: Como Dam Water Resource Enhancement

River, stream, or lake: Lake Como with effects on Rock Creek and the Bitterroot River

Location: Township: 4 N Range: 21 W Section: 32

Latitude: 46°3'51.10"N Longitude: 114°14'2.52" W *within project (decimal degrees)*

County: Ravalli County

B. Purpose of Project: _____

Como Dam water regulation improvement

Bitter Root Irrigation District (BRID) owns and operates Lake Como and the dam and outlet works. For several years the District has been aware of noticeable deficiencies with the two valves that regulate flow out of Lake Como. The primary purpose of this project is to restore and preserve the ability for Bitter Root Irrigation District to regulate flows leaving Lake Como and sustain in-stream fishery waters to the Bitterroot River in late season according to the Reclamation Agreement #1425-4-MA-10-00950 with Montana Fish, Wildlife and Parks (MFWP). Per the agreement MFWP has an in-stream reserved storage right for 3,037 acre-feet of reservoir water for late season flows to benefit aquatic life.

C. Brief Project Description:

Bitter Root Irrigation District supplies water from Lake Como along a 72 mile stretch of canals and siphons to 16,665 irrigated acres. BRID operates the Como Dam outlet works. For the past several years the District has noted deficiencies with their two valves that regulate flow out of Lake Como. These two valves are over 108-years old and are 66-inches in size. Each valve is a gate valve with the upstream valve being the operating valve and the downstream valve being the guard valve. In March of 2018, Morrison-Maierle, the District, and a valve specialist observed a significant decline in the condition of the existing deficient valves. The leak was observed to be much more significant than years past and was observed and measured at a rate of 3.3 cubic feet per second equating to approximately 1,400 acre-feet during the non-irrigation season.

The specific issues with water reliability are related to the condition of the gate valves within the outlet works. Over worsening condition of the valves has resulted in two primary issues effecting water reliability:

1. Water loss reducing the ability to impound storage water during the non-irrigations season. Approximately 1,400 acre-feet of water leaks through the outlet works. During very dry years, it is a challenge to impound water for obligations and the loss of 1,400 acre-feet through lessens the ability to fulfil these water obligations.
2. Potential for valve failure, which would result in the complete loss of the ability to deliver water for all uses. The condition of the valves degraded to a point of which there is concern they will become inoperable. Under this scenario, failure of the valves in an open or closed position both have significant repercussions that result in the inability to impound or serve water obligations.

The proposed project would replace these valves with new 66-inch gate valves to preserve the ability to control release of water for irrigation and aquatic storage rights and to prevent storage losses.

D. Length of stream or size of lake that will be treated: 38,495 acre-feet at regulating elevation.

E. Project Budget:

Grant Request (Dollars): \$ 150,000

Contribution by Applicant (Dollars): \$ 416,080 In-kind \$ 20,190
(salaries of government employees are not considered as matching contributions)

Contribution from other Sources (Dollars): \$ 725,000 In-kind \$
(attach verification - See page 2 budget template)

Total Project Cost: \$ 1,311,270.00

F. Attach itemized (line item) budget – see template

- Attach **specific project plans, detailed sketches, plan views, photographs, maps, evidence of landowner consent, evidence of public support and fish biologist support, and/or other information necessary to evaluate the merits of the project. If project involves water leasing or water salvage complete a *supplemental questionnaire*** (fwp.mt.gov/habitat/futurefisheries/supplement2.doc).
- H. **Attach land management & maintenance plans that will ensure protection of the reclaimed area.**

III. PROJECT BENEFITS*

- A. What species of fish will benefit from this project?:

Bull trout, westslope cutthroat trout, mountain whitefish, northern pike minnow, longnose dace, reidside shiner, peamouth, longnose and largscale sucker, Columbia slimy sculpin, brown trout, brook trout, rainbow trout, northern pike, and largemouth bass.

- B. How will the project protect or enhance wild fish habitat?:

The proposed project will conserve approximately 1,400 acre-feet of water for aquatic habitat within Lake Como to allow for release into the Bitterroot River during the late season per the Reclamation Agreement. An agreement between the United States Department of Interior, Bureau of Reclamation, and the Montana Fish, Wildlife and Parks dated 1994 outlines the uses of water storage in Lake Como and the in-stream water. The agreement, entitled Como Dam Enlargement #1425-4-MA-10-00950, is included as an attachment. The implementation of this project increases the ability to serve obligations through the conservation of impound water during the non-irrigation season.

Fish habitat consists of cool and clean water, gravel river beds, protective riverbanks, and food. Many characteristics of fish habitat are dependent on water. Protective riverbanks are provided when enough water is flowing. Without protective riverbanks, many adolescent fish are unable to hide from predators.

Oxygenated water is key to survival for fish. Oxygen is typically introduced to water through aeration, which can be initiated by flowing over rocks. When water levels are low, river velocity slows resulting in less aeration and subsequently less oxygen within the water. When water levels get extremely low and become stagnant, oxygen levels become extremely low. Additionally, fish can then become landlocked and survival rates rapidly decrease.

- C. Will the project improve fish populations and/or fishing? To what extent?:

The Bitterroot River's fish population is already considerably higher than similar rivers of its size. The proposed project will help to ensure that the 3,037 acre-feet of fishery water is available as called upon by MFWP to be released anytime between July 15 and November 1, per Reclamation Agreement #1425-4-MA-10-00950. During times of lower flow, this project would allow fish to access more aquatic habitat on a consistent basis. Typically, large amount of adolescent fish do not survive a year or even multiple years. Without flowing water and protective riverbanks, the odds of survival for these adolescent fish significantly decrease.

In addition, as flows lower and water begins to slow down, water temperatures rise and put increasing pressure on the fish to survive. Often during these periods of low flow and extreme heat, fishing restrictions are put in place. If fishery water is available, habitat can be preserved resulting in increased fish populations. Both of these would result in increased fishing opportunities and reductions in fishing restrictions.

Como Dam water regulation improvement

- D. Will the project increase public fishing opportunity for wild fish and, if so, how?:

The proposed project would increase public fishing opportunity by increasing fish population within the Bitterroot River and Lake Como. Additional water would be available for aquatic habitat within Lake Como and fishery water would be available to the Bitterroot River. By helping to ensure that water is available for fishery use late in the year, fish habitat can be preserved and fishing restrictions may not be required to be put in place. Public fishing opportunities are increased both in Lake Como and the Bitterroot River.

- E. The project agreement includes a 20-year maintenance commitment. Please discuss your ability to meet this commitment.

The Bitter Root Irrigation District owns and operates Lake Como and the dam outlet works and is also obligated to manage the facilities per Reclamation Agreement #1425-4-MA-10-00950. Every year the District performs an inspection on their outlet works and operates each of the valves, at a minimum at the start and end of the irrigation season. Additionally, due to outstanding debt to the United States Bureau of Reclamation (USBR), every 6 years the USBR performs a Comprehensive Facility Review. By performing these annual and periodic inspections the dam's outlet works are observed regularly and any maintenance issues are identified before an issue is allowed to escalate. The proposed project anticipates minimal maintenance will be required.

- F. What was the cause of habitat degradation in the area of this project and how will the project correct the cause?:

The existing condition of the Como Dam outlet works consists of a 3.3 cubic feet per second leak equating to 1,400 acre-feet of water per non irrigation season. Aquatic habitat is degraded from the loss in ability to conserve approximately 1,400 acre-feet of water for irrigation, fishery waters, and storage water within Lake Como. The degradation in habitat can be directly attributed to the leaking gate valves and their significant decline in condition. The proposed project would replace these extremely old valves eliminating the leak resulting in aquatic habitat enhancement.

Como Dam water regulation improvement

G. What public benefits will be realized from this project?:

Public benefits realized from this project include agricultural, economic, environmental, natural resource based recreation, and public safety. Valve failure of the dam outlet works would result in detrimental effects to the aforementioned benefits.

Agriculture: The proposed project reduces losses and preserves the ability to control flow into the Bitter Root Irrigation District, which serves 1,400 water users over 16,665 irrigated acres resulting in an economic crop value of approximately \$9 million.

Environmental: The proposed project reduces losses and preserves the ability to impound storage water for the purpose of in-stream flow reserved storage into the Bitterroot River to mitigate chronic shortage of instream flows. 3,037 acre-feet of water is stored, which is typically released at 50 cfs during the late season. MFWP can call for the ins-stream flow reserved storage water between July 15 and November 1.

Recreation: The proposed project allows for extension of the boating season in Lake Como according to the agreement between MFWP and the Bureau of Reclamation. In addition, the proposed project prevents the risk associated with complete loss of storage water in Lake Como due to valve failure in the open position. Preventing water losses extend the boating season in Lake Como. According to the U.S. Forest Service Bitterroot National Forest website, Lake Como serves an estimated 200,000 people annually making it the most utilized recreation site in the entire Northern Region of the Forest Service. It is easily accessible year-round and visitor use continues to increase. The U.S. Forest Service Northern Region is described as encompassing 25 million acres and is spread over 5 states. Included are 12 National Forests located within the perimeter of northeastern Washington, northern Idaho, and Montana; and the National Grasslands in North Dakota and northwestern South Dakota. With Lake Como being the most utilized recreation site in the entire Northern Region, maintaining water storage is clearly of great importance.

In addition, preserving the ability to delivery water through the outlet structure also has a positive effect on fishing opportunities on the Bitterroot River through the improvement of angling conditions and also the potential reduction in fishing restrictions.

Safety: Due to the age and worsening condition of the valves, it is inevitable the valves will eventually fail. If the valves failed in the up position, flow releases from Como Dam would not be controlled. This would result in uncontrolled release of irrigation and fishery storage waters. The outlet stilling basin is limited to a capacity of 600 cubic feet per second (cfs). Flows in excess of 600 cfs would result in erosion and could create a potential failure mode. There is also concern that valve failure at the time of full reservoir capacity could result in excessive outlet flows that would have detrimental effects on the dam posing a significant safety risk to the public. The losses associated with total dam failure are difficult to comprehend and could result in devastating impacts to property and loss of life.

H. Will the project interfere with water or property rights of adjacent landowners? (explain):

The project will not affect property rights of adjacent landowners as no work is proposed outside of the dam outlet works or to any adjacent property. Bitter Root Irrigation District owns and operates Lake Como and the dam outlet works. The project will promote and preserve water rights associated with irrigation and aquatic habitat benefits.

- I. Will the project result in the development of commercial recreational use on the site?: (explain):

The project will result in the preservation of commercial recreation associated with Lake Como and the Bitterroot River. Residents from across Montana utilize the natural resource based recreation offered by Lake Como and the Bitterroot River. According to the U.S. Forest Service Bitterroot National Forest website, Lake Como serves an estimated 200,000 people annually making it the most utilized recreation site in the entire Northern Region of the Forest Service.

The Bitterroot River is considered a main fishing destination for anglers across Montana. With 13 different fishing accesses and approximately 1,000 fish per river mile, the Bitterroot River provides a significant form of natural resource based recreation. Elimination of the leak and preservation of 1,400 acre-feet of water helps to ensure that 3,000 acre-feet of water will be able to be provided to the Bitterroot River during the late season to maintain and preserve aquatic habitat in the Bitterroot River.

- J. Is this project associated with the reclamation of past mining activity?:

There is no reclamation of past mining activity associated with this project.

Each approved project applicant must enter into a written agreement with Montana Fish, Wildlife & Parks specifying terms and duration of the project. The applicant must obtain all applicable permits prior to project construction. A competitive bid process must be followed when using State funds.

IV. AUTHORIZING STATEMENT

I (we) hereby declare that the information and all statements to this application are true, complete, and accurate to the best of my (our) knowledge and that the project or activity complies with rules of the Future Fisheries Improvement Program.

Applicant Signature:



Date:

5-28-18

Sponsor (if applicable):

***Highlighted boxes will automatically expand.**

Como Dam water regulation improvement

Mail To: Montana Fish, Wildlife & Parks
Fisheries Division
PO Box 200701
Helena, MT 59620-0701

E-mail To: Michelle McGree
mmcgree@mt.gov
(electronic submissions MUST be signed)

Incomplete or late applications will be rejected and returned to applicant.
Applications may be rejected if this form is modified.

*****Applications must be signed and *received* by the Future Fisheries Program Officer in Helena before December 1 and June 1 of each year to be considered for the subsequent funding period.*****

Budget

BUDGET TEMPLATE SHEET FOR FUTURE FISHERIES PROGRAM APPLICATIONS

Both tables must be completed or the application will be returned

WORK ITEMS (ITEMIZE BY CATEGORY)	NUMBER OF UNITS	UNIT DESCRIPTION*	COST/UNIT	TOTAL COST	CONTRIBUTIONS			
					FUTURE FISHERIES REQUEST	IN-KIND SERVICES**	IN-KIND CASH	TOTAL
Personnel***								
BRID Manager	465	HRS	\$40.00	\$ 18,600.00		18,600.00	-	\$ 18,600.00
Project Principal	16	HRS	\$206.00	\$ 3,296.00			3,296.00	\$ 3,296.00
Project Manager	250	HRS	\$160.00	\$ 40,000.00			40,000.00	\$ 40,000.00
Project Engineer	500	HRS	\$124.00	\$ 62,000.00			62,000.00	\$ 62,000.00
Construction Observation	380	HRS	\$117.00	\$ 44,460.00			44,460.00	\$ 44,460.00
Drafting	200	HRS	\$107.00	\$ 21,400.00			21,400.00	\$ 21,400.00
Administrative	20	HRS	\$88.00	\$ 1,760.00			1,760.00	\$ 1,760.00
Reproduction	15	HRS	\$73.00	\$ 1,095.00			1,095.00	\$ 1,095.00
			Sub-Total	\$ 192,611.00	\$ -	\$ 18,600.00	\$ 174,011.00	\$ 192,611.00
Travel/Supplies								
Mileage	5000	MILES	\$0.70	\$ 3,500.00			3,500.00	\$ 3,500.00
Production/Copy	1090	EACH	\$0.10	\$ 109.00		40.00	69.00	\$ 109.00
Advertising	2	EACH	\$775.00	\$ 1,550.00		1,550.00	-	\$ 1,550.00
Construction Plans	50	EACH	\$10.00	\$ 500.00			500.00	\$ 500.00
			Sub-Total	\$ 5,659.00	\$ -	\$ 1,590.00	\$ 4,069.00	\$ 5,659.00
Construction Materials (Includes Labor)								
Dewatering	1	LS	\$60,000.00	\$ 60,000.00			60,000.00	\$ 60,000.00
Bulkhead	1	LS	\$5,000.00	\$ 5,000.00			5,000.00	\$ 5,000.00
Remove & Replace Gate House	1	LS	\$10,000.00	\$ 10,000.00			10,000.00	\$ 10,000.00
Removal of Existing Valves & Assembly	1	LS	\$85,000.00	\$ 85,000.00			85,000.00	\$ 85,000.00
New Gate Valves & Assembly	1	LS	\$675,000.00	\$ 675,000.00	150,000.00		525,000.00	\$ 675,000.00
Remove Operators & Stems	1	LS	\$7,000.00	\$ 7,000.00			7,000.00	\$ 7,000.00
Replace Operators & Stems	1	LS	\$59,000.00	\$ 59,000.00			59,000.00	\$ 59,000.00
Startup & Testing	1	LS	\$3,000.00	\$ 3,000.00			3,000.00	\$ 3,000.00
Site Restoration	1	LS	\$1,500.00	\$ 1,500.00			1,500.00	\$ 1,500.00
Contingency	1	LS	\$185,500.00	\$ 185,500.00			185,500.00	\$ 185,500.00
			Sub-Total	\$ 1,091,000.00	\$ 150,000.00	\$ -	\$ 941,000.00	\$ 1,091,000.00
Equipment								
Included in line items for Construction Materials				\$ -				\$ -
				\$ -				\$ -
			Sub-Total	\$ -	\$ -	\$ -	\$ -	\$ -
Mobilization								
Mobilization & Demobilization	0.02	2% of Construction	\$1,113,000.00	\$ 22,000.00			22,000.00	\$ 22,000.00
			Sub-Total	\$ 22,000.00	\$ -	\$ -	\$ 22,000.00	\$ 22,000.00
TOTALS				\$ 1,311,270.00	\$ 150,000.00	\$ 20,190.00	\$ 1,141,080.00	\$ 1,311,270.00

*Units = feet, hours, inches, etc. Do not use lump sum unless there is no other way to describe the costs.

MATCHING CONTRIBUTIONS (do not include requested funds)

CONTRIBUTOR	IN-KIND SERVICE	IN-KIND CASH	TOTAL	Secured? (Y/N)
Bitter Root Irrigation District (Applicant/Landowner)	\$ 20,190.00	\$ 416,080.00	\$ 436,270.00	Y
DNRC Renewable Resource Grant	\$ -	\$ 125,000.00	\$ 125,000.00	Y
USBR WaterSMART Grant	\$ -	\$ 300,000.00	\$ 300,000.00	Pending
Ravalli County	\$ -	\$ 300,000.00	\$ 300,000.00	Y
	\$ -	\$ -	\$ -	
	\$ -	\$ -	\$ -	
	\$ -	\$ -	\$ -	
	\$ -	\$ -	\$ -	
	\$ -	\$ -	\$ -	
TOTALS	\$ 20,190.00	\$ 1,141,080.00	\$ 1,161,270.00	

Como Dam water regulation improvement

USBR and MFWP Agreement 14-4-MA-10-00950

AGREEMENT BETWEEN THE
MONTANA DEPARTMENT OF FISH, WILDLIFE AND PARKS
AND THE
UNITED STATES DEPARTMENT OF INTERIOR, BUREAU OF RECLAMATION
FOR THE
ENLARGEMENT OF COMO DAM

Under the authority of Public Laws 95-578 and 98-404, the Reclamation Safety of Dams Act and Amendment.

Montana Department of Fish, Wildlife and Parks - under the authority of Section 87-1-201, MCA, 1993

This agreement is made and entered into by and between the Montana Department of Fish, Wildlife and Parks, acting by and through its Director, hereinafter referred to as Fish, Wildlife and Parks, and the U.S. Department of Interior, Bureau of Reclamation, acting by and through the Regional Director, Pacific Northwest Region, Boise, Idaho, hereinafter referred to as Reclamation. The purpose of this agreement is to provide for the funding, design, construction, and operation of an enlarged storage pool in Lake Como by raising the active storage level of the reservoir by 3.3 feet and to use the increased storage for instream flow purposes and recreation.

WITNESSETH THAT:

WHEREAS, Reclamation has performed major reconstruction of the embankment at Como Dam to correct serious Safety of Dams deficiencies, and

WHEREAS, Safety of Dams modifications to Como Dam spillway, outlet tower, and site features are scheduled for construction beginning in the summer of 1994, and

WHEREAS, Safety of Dams legislation (Public Laws 95-578 and 98-404) prohibits funding under the Acts of additional project benefits during modifications to resolve safety problems but directs that all alternatives, both structural and non-structural be evaluated, and

WHEREAS, a chronic shortage of instream flows exists during the summer months in the Bitterroot River downstream from Como Dam, and

WHEREAS, Como Lake is the primary motor boating site in the area and the boating season is usually cut short due to reservoir draw-down, and

WHEREAS, studies indicate that additional water supplies could be available from Rock Creek from an enlargement of Lake Como for enhancement of minimum late-season instream flows in the Bitterroot River, and

WHEREAS, extensive public involvement has identified widespread support from local and state governments, the Bitter Root Irrigation District, and the public for enlarging Lake Como, and

WHEREAS, the State of Montana legislature has authorized funding of \$400,000 for an enlargement of Lake Como, and

WHEREAS, preliminary investigations indicate that a 3.3-foot raise of Como Dam is feasible and a mutual cost savings could be realized from combining the construction of Safety of Dams modifications and an enlargement of Como Dam:

NOW THEREFORE, BE IT RESOLVED, that the parties hereby enter into an agreement, the purpose of which is to provide funding for Reclamation to perform final designs and construction, including construction management,

contract administration and overhead, for an enlargement of Como Dam. Como Dam is owned and operated by the Bitter Root Irrigation District.

Project Title: Como Dam Enlargement
Agreement Number: 1425-4-MA-10-00950

To implement the foregoing, the parties agree as follows:

A. OPERATIONS

1. The enlargement of Lake Como will raise the active storage pool 3.3 feet, from the current active storage level of 4242.7 feet to 4246.0 feet at the crest of the new ogee overflow spillway. The intended purpose of the additional storage in Lake Como will be to enhance instream flows in the Bitterroot River during low flow periods of the year and lengthen the recreational boating season on Como Lake.
2. The additional storage in Lake Como created by the enlargement is 3,037 acre-feet, based on active storage values found in Reclamation's September 1992 area and capacity tables. This pool will be known as the "instream flow reserved storage." (Active capacity at elevation 4246.0 feet is 38,495 acre-feet and 35,458 acre-feet at elevation 4242.7 feet.)
3. The instream flow reserved storage in Lake Como will be operated as follows:
 - * a. All water stored in Lake Como above elevation 4242.7 feet, not to exceed 3,037 acre-feet, will be credited and dedicated on an annual basis to instream flow reserved storage.
 - b. Fish, Wildlife and Parks will have the right to call for releases from instream flow reserved storage from July 15 to November 1 of each year.
 - c. The flow to be released will be within standard release practices of the Bitter Root Irrigation District.
 - d. Fish, Wildlife and Parks will provide a minimum of 24 hours notice prior to the release of water from the instream flow reserved storage.
 - e. At the end of the flow augmentation period, July 15 through November 1, all remaining water credited to instream flow reserved storage will revert to the irrigation storage pool within Lake Como.
 - f. No carryover storage will be credited to instream flow reserved storage.
4. Fish, Wildlife and Parks will be notified each year by July 1 as to the amount of water available in the instream flow reserved storage at Lake Como.
5. After receiving a valid request from Fish, Wildlife and Parks, releases to the specified amount and flow will be made from Lake Como within 24 hours.
6. The point of delivery for the instream flow releases during the irrigation season will be Rock Creek at the Bitterroot Irrigation District diversion dam. During the non-irrigation season, the point of delivery will be Como Dam outlet. The instream flow releases will be passed by the diversion dam.
7. Lake Como will be operated in a prudent manner to fill the instream flow reserve storage to the extent possible, while complying fully with any

space requirements based on flood control precautions as outlined in the Standing Operating Procedures for Como Dam.

B. FISH, WILDLIFE AND PARKS WILL:

1. Provide funding up to \$400,000 for the total cost of the project. Up to \$300,000 will be provided to Reclamation for final designs, construction, and construction management for enlarging Como Dam as outlined in this agreement. Up to \$100,000 will be provided to Reclamation or other parties in separate orders for work associated with construction or operation of the enlarged Lake Como, including mitigation for cultural and recreational resources. Availability of project funds is contingent upon the prior approval of the project by the U. S. Fish and Wildlife Service.
2. Make application to the U.S. Fish and Wildlife Service for project approval and secure all necessary environmental and cultural resources clearances associated with operation of the enlarged Lake Como.
3. Enter into an agreement with the Bitter Root Irrigation District to reimburse the district for annual operation and maintenance costs associated with the operation of instream flow reserved storage in Lake Como.
4. Will indemnify and hold harmless Reclamation and the operators of Como Dam, the Bitter Root Irrigation District, against any claim or action challenging the use of the water under the terms of this Agreement.
5. Provide for a gaging station or other measuring devices on Rock Creek downstream from the point of delivery to measure releases from the instream flow reserved storage.

C. RECLAMATION WILL:

1. Perform final designs and construction, including contract administration and construction management, for enlargement of Como Dam as outlined in this agreement.
2. Enter into an operating agreement with the Bitter Root Irrigation District for the operation of instream flow reserved storage in Lake Como under the terms of this Agreement.
3. Mediate any disputes over quantity of water available or operation of the instream flow reserved storage in Lake Como between Fish, Wildlife and Parks and the Bitter Root Irrigation District.
4. Acknowledge Fish, Wildlife and Parks financial sponsorship, including Federal Aid in Sport Fish Restoration Program funding, at the project site and in pertinent literature, both during and after construction.
5. Provide the State of Montana with designs for Safety of Dams modifications and the enlargement and permit the site to be inspected by Montana Department of Natural Resources and Conservation and Fish, Wildlife and Parks.

D. IT IS MUTUALLY AGREED:

1. That nothing in this Agreement shall be construed as placing the Fish Wildlife and Parks in the position of the guarantor to Reclamation or to any third party, other than as is expressly set out in this Agreement.
2. That no member of or delegate to Congress, or resident commissioner shall be admitted to any part of this Agreement, or to any benefit that may arise therefrom.

3. That nothing herein shall be construed as obligating Reclamation, or Fish, Wildlife and Parks to expend funds, or as involving either party in any contract or other obligation for the future payment of money, in excess of appropriations authorized by law, and approved for expenditure.

4. That all improvements at Como Dam shall remain in title to the Bitter Root Irrigation District, the current owner of the dam.

5. That this agreement may be amended at any time by mutual written agreement of the parties hereto.

6. This Agreement will be in effect through the functional life of the Como Dam enlargement unless an earlier termination is mutually agreed to by the parties and the Bitter Root Irrigation District. If an earlier termination is agreed to, the Bitter Root Irrigation District may use the water in the instream flow reserved storage for other purposes.

7. That nothing in this Agreement shall be interpreted to work as an abandonment or as evidence of an intent to abandon any water right associated with Lake Como storage.

8. That nothing in this Agreement shall be construed as to impact the original grant from the U.S. Department of Interior to the District or any existing easements or Special Use Permits between the District and the U.S. Department of Interior or U.S. Department of Agriculture related to the irrigation storage pool and the embankment and appurtenant structures at Como Dam.

9. That all written communications which are to be given to the Fish, Wildlife and Parks under this Agreement will be delivered to:

Administrator
Fisheries Division
Department of Fish, Wildlife and Parks
1420 E. 6th Ave.
Helena MT 59620-0701

All written communications which are to be given to Reclamation under this agreement will be delivered to:

Regional Director
Bureau of Reclamation
1150 N. Curtis
Boise ID 83706

The above shall be effective until written notice of a change to the other party.

E. METHOD OF PAYMENT

1. Reclamation will submit quarterly billings for expenses associated with the final designs, construction, construction management, contract administration, and overhead associated with the enlargement of Como Dam.

2. Upon receipt of quarterly billings, Fish, Wildlife and Parks will process payment within 30 days.

3. Upon completion of the construction at Como Dam, Reclamation will prepare a report on the work accomplished and include a breakdown and full and final accounting of all expenditures related to the enlargement.

4. Reclamation will retain accounting records for three fiscal years after the completion of the project, subject to provisions of the Privacy Act and other applicable federal laws, and allow Fish, Wildlife and Parks or authorized representatives to inspect and review all related records during normal office hours at the Regional Office in Boise, Idaho.

IN WITNESS THEREOF the parties hereto cause this Agreement to be properly executed by their authorized representatives.

BY

Richard Walsh
(signature)

7-8-94

(date)

Director
Montana Department of Fish, Wildlife and Parks

BY

Deborah L. Schwarz
(signature)

7/29/94

(date)

Regional Director
Pacific Northwest Region
Bureau of Reclamation
U.S. Department of the Interior

533.90

Site Visit Photos

Site Visit Photos March 2018

Como Dam water regulation improvement



Dewatering of stilling basin during March 2018 site visit



Dam outlet works gate house

Como Dam water regulation improvement



Gate house valve operators and stems



Gate house valve operators and stems

Como Dam water regulation improvement



Outlet pipe leakage rate



Regulating valve leak during March 2018 site visit

Como Dam water regulation improvement

Letters of Support

Como Dam water regulation improvement

FWP.MT.GOV



THE **OUTSIDE** IS IN US ALL.

Region 2 Headquarters
3201 Spurgin Road
Missoula, MT 59804

March 11, 2019

John Crowley
Bitter Root Irrigation District
1182 Lazy J Lane
Corvallis, MT 59828

Dear John,

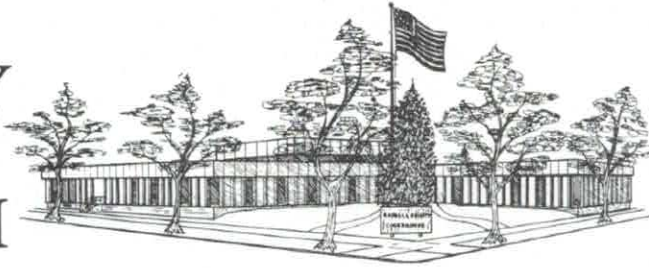
I am writing you to give FWP's support for replacing the valves of Como Dam. FWP owns 3,037 acre-feet of water in Lake Como that is stored behind and released from Como Dam. This water was purchased to enhance instream flows in the Bitterroot River during low flow periods of the year and lengthen the recreational boating season on Lake Como. Losses of water through the valves has been increasing and is currently 1,400 acre-feet when the valves are closed in the off-season. Replacing the valves will significantly reduce the amount of lost water, as well as insure the ability to manage water releases.

Thank you for your efforts to repair the valves. We look forward to many more years of insuring quality boating experiences on Lake Como and supplying water to support the extremely valuable Bitterroot River trout fishery.

Sincerely,

Patrick Saffel
Fisheries Manager, Missoula
406-542-5507

COUNTY OF RAVALLI



Ravalli County Commissioners
215 South 4th Street, Suite A
Hamilton, MT 59840
406-375-6500 • 406-375-6507 fax
commissioners@ravallicounty.mt.gov

March 11, 2019

Bitter Root Irrigation District

RE: Letter of Commitment by Ravalli County for \$300,000 Interest Free Loan

To Whom It May Concern,

The Ravalli County Commissioners have committed \$300,000 in the form of an interest free loan with a Thirty (30) Year term. The Ravalli County Commissioners understand the importance of the Como Lake Dam to our community and support the Como Lake Dam valve replacement project.

Sincerely,
RAVALLI COUNTY BOARD OF COMMISSIONERS


Jeff Burrows, Chairman

DEPARTMENT OF NATURAL RESOURCES
AND CONSERVATION



STEVE BULLOCK, GOVERNOR

1539 ELEVENTH AVENUE

STATE OF MONTANA

DIRECTOR'S OFFICE: (406) 444-2074
FAX: (406) 444-2684

PO BOX 201601
HELENA, MONTANA 59620-1601

03/11/2019

John Schmiedeke
Bitter Root Irrigation District
1182 Lazy J Lane
Corvallis, MT 59828

RE: Funding Status Bitter Root Irrigation District Como Dam Water Resource Enhancement Project

Dear John,

Thank you for submitting applications to the RRGL program for your project. The application is currently ranked 12th and will be funded through House Bill 6. A formal letter will be sent out in May once the Bill is final with the award amount of \$125,000.

House Bill 6 is effective July 1, 2019. Funding will be available to projects based on rank and funding availability. I will need an updated scope, schedule and budget to enter into an agreement for the RRGL program funds.

Please contact me to discuss the follow up questions. I look forward to working with you to reach your resource goals on these projects.

Respectfully,

Lindsay Volpe

A handwritten signature in black ink, appearing to read "Lindsay Volpe".

RRGL Program Manager
406-444-9766 lmvolpe@mt.gov

Enclosure:
RRGL Ranked List

cc: file

Como Dam water regulation improvement

March 15, 2019

To Whom in May Concern:

The Purpose of the Clark Fork and Kootenai River Basins Council is to develop vision, coordinate common strategy, and support the network of water user interests at the basin scale. The Clark Fork and Kootenai River Basins Council identifies and addresses common basin-wide concerns, challenges, and solutions that are best addressed at the basin-level.

Members of the Clark Fork and Kootenai River Basins Council participated in the State Water Planning process under the previous name the Clark Fork Task Force. The planning process resulted in the development of the Clark Fork & Kootenai River Basins Water Plan (2014), which is part of the Montana State Water Plan (2015). The major recommendations of that planning process focused on drought readiness, ecosystems and instream flows, infrastructure and irrigation, recreation, water conservation and water storage.

This letter is submitted in support of the Como Dam Valve Replacement Project. This project involves the replacement of dysfunctional gate valves in Como Dam that regulate storage in Lake Como. Under the current condition, the valves leak water during non-critical times that could otherwise be impounded for use of instream flows and irrigation. The valves are at risk of complete failure, which would prevent the delivery of water for downstream irrigation and in-stream flows and affect storage levels for recreation in Lake Como. Implementation of this project supports:

- Drought readiness through efficiently managing storage in the reservoir,
- Fisheries and instream flows through conserving water losses for use during critical periods,
- Infrastructure and irrigation through improvements to critical infrastructure that regulates flows out of Lake Como,
- Recreation by avoiding catastrophic impacts to Lake Como by replacing critical infrastructure prior to failure, and
- Water conservation and water storage through effective management of stored water.

This project has basin-wide effect for the Bitterroot Valley within the Clark Fork Basin and aligns with the findings of the Clark Fork & Kootenai River Basins Water Plan.

Respectfully,

The Executive Committee of the Clark Fork and Kootenai River Basins Council

Meg Casey
Maureen Connor
Thomas Cox
Molly Davidson
Bonnie Holzworth
Michael Howell

Verdell Jackson
Susan Lake
Evan Norman
Travis Ross
Jennifer Schoonen
David Shively



**RAVALLI COUNTY
OFFICE OF EMERGENCY MANAGEMENT**

205 Bedford Suite J Hamilton MT 59840

Phone: (406) 375-6655

Bitterroot Irrigation District
1182 Lazy J Lane
Corvallis, MT 59828

To Whom It May Concern:

I am writing in support of the District's application for the Water Smart Water & Energy Efficiency Grant, and also the overall project of the replacement of the gate valves at the Como Dam. As you may know, my office is concerned and tasked with coordinating planning, preparedness and mitigation of potential emergencies and disasters. Dam safety has always been a part of my efforts, and is of particular concern due to the location and volume of water held in the Como facility.

The District has always been a great partner to my Office and our community in dam safety and emergency preparedness. It has been noted in recent examinations that the gate valves at the Como Dam are in need of replacement. The existing valves are aging and have been shown to leak water. Additionally, this presents an elevated risk to the infrastructure of the Dam. The District has recognized this risk and has already taken steps to secure funding sources for the replacement of the gate valves.

I appreciate the proactive steps that the District has taken in these efforts and, for this reason, I offer my full support for this application and gate valve replacement project.

Respectfully,

Erik Hoover
Director, Office of Emergency Management
Ravalli County, Montana



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President

Charlie Larson
Vice President

Sherry Ritter
Secretary

Don McGourty
Treasurer

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Megan Winderl

Scott Ziegenfuss

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Dan Huls

Dan Severson

Executive Director

Heather Barber

Programs Coordinator

Katie Vennie

AmeriCorps Member

Emilie Lahneman

Bookkeeper

Jenny West

PO Box 1247
Hamilton, MT 59840

(406) 375-2272
brwaterforum@
bitterroot.net

brwaterforum.org

March 5, 2019

RE: Letter of support for the Bitter Root Irrigation District

To Whom It May Concern,

The Bitter Root Water Forum is writing in support of the Bitter Root Irrigation District's (BRID) Como Valves project.

The Bitter Root Water Forum is a community driven non-profit organization dedicated to supporting the traditions of agriculture, community, and recreation by protecting, enhancing and restoring the Bitterroot Watershed through on the ground restoration projects and watershed education. We bring the community together to shape the future of the watershed we all rely on.

The Bitterroot River watershed and local irrigation systems provide life-sustaining water resources to local communities. Without the River and irrigation infrastructure, our communities would not be able to survive, let alone thrive, in this otherwise arid valley. The Big Ditch, supported by BRID, is a vital piece of infrastructure within the Bitterroot watershed. The current state of the system is affecting instream flows in the Bitterroot River as well as irrigation intake for the Ditch. Gone unaddressed, this problem could affect hundreds of water users, thousands of acres of irrigable land, and water availability for fish, among other things. This is a problem that needs immediate attention.

We strongly encourage USBR WaterSmart to fund the proposal to address the valve leak issues for the benefit of local communities.

Please do not hesitate to get in touch with any questions.

Best,

A handwritten signature in cursive script that reads "Heather Barber".

Heather Barber
Executive Director

Como Dam water regulation improvement



Christine Brissette
Special Projects Manager

312 N. Higgins Ave., Suite 100
Missoula, MT 59802
406-541-1193
cbrissette@tu.org

March 13, 2019

RE: BRID Como Valve Project

To the WaterSMART Grant Review Committee:

Trout Unlimited (TU) would like to express its support for the Bitter Root Irrigation District's (BRID) application for funding to replace the valve at the Como Dam. This project aligns directly with the goals of WaterSMART by improving aging infrastructure to ensure reliable water delivery both for multiple uses, including fisheries.

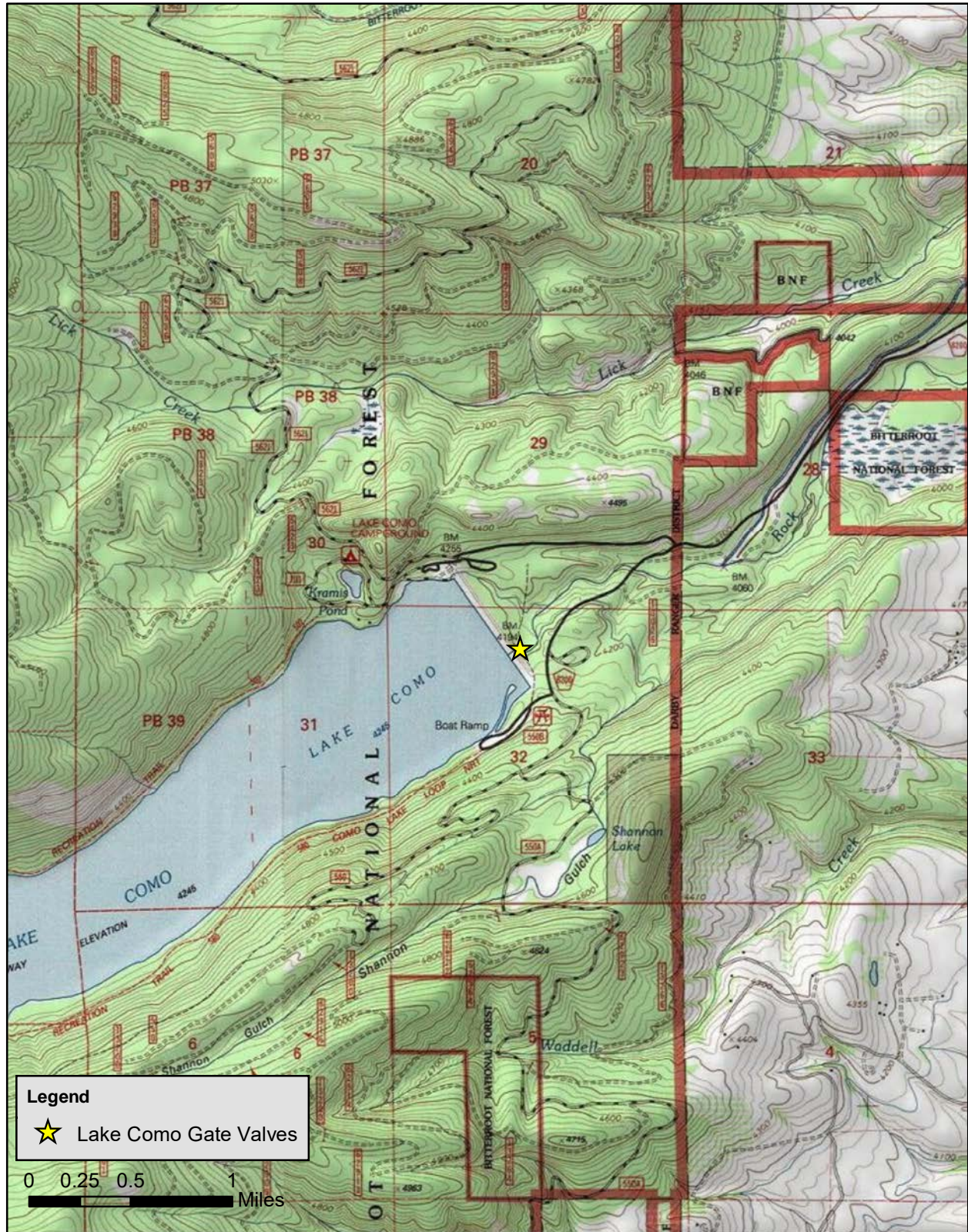
Agriculture and fishing are central to the economy and culture of the Bitterroot Valley, and both rely heavily on reliable water supply. While the Como Dam is primarily used to store water for irrigation, over 3,000 acre-feet is owned by Montana Fish Wildlife and Parks to support instream flow. Because so much water in the valley is diverted for agriculture, reservoir storage has become a critical management tool to maintain Bitterroot River flows and cool temperatures. It is essential to sustaining our native fishery, and the \$28 million local recreational fishing industry. The Como Dam valve replacement project is critical to ensuring storage and delivery of this water.

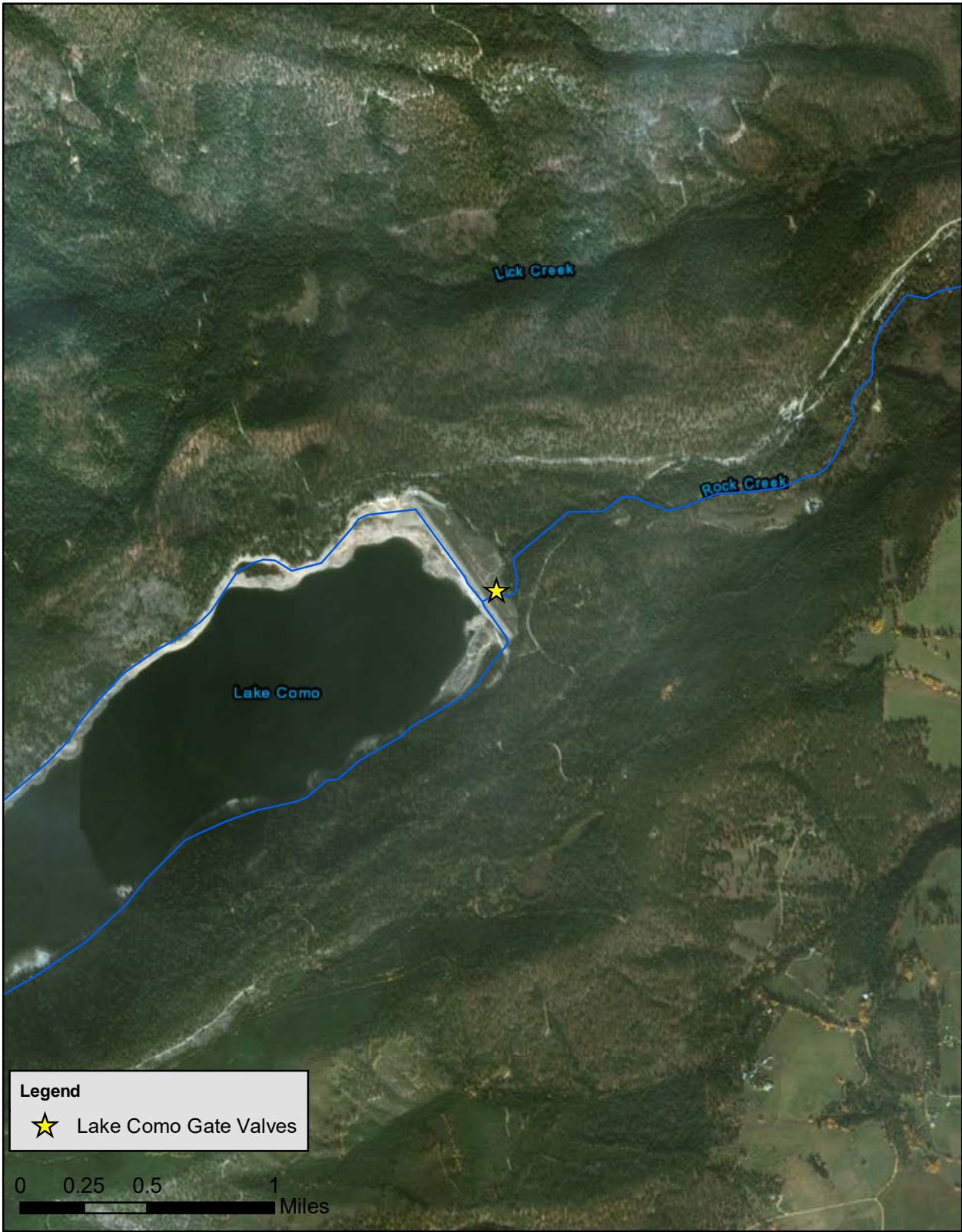
Thank you for your consideration,

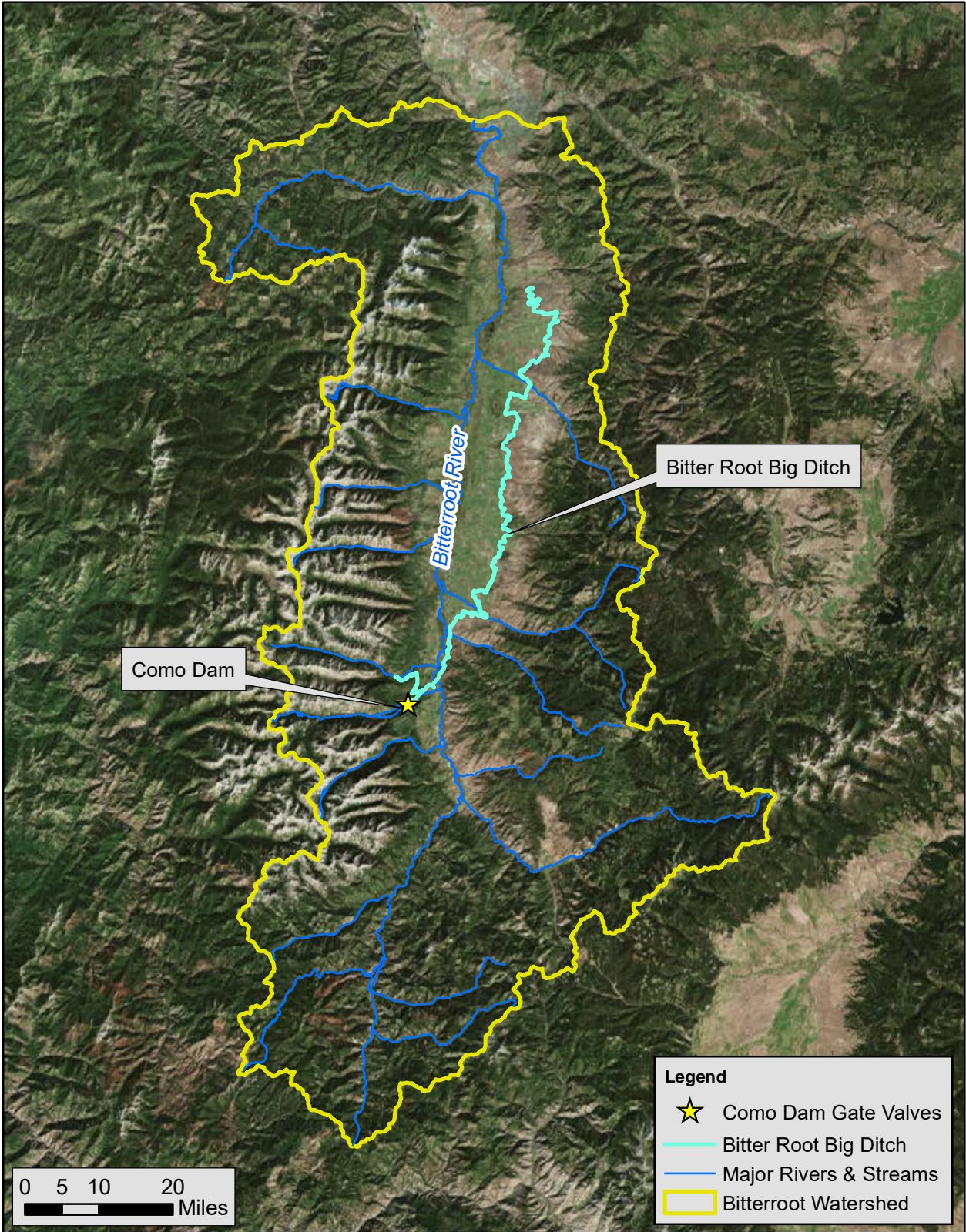
Christine Brissette
Special Projects Manager
Western Water and Habitat Program
Trout Unlimited

Site Maps

Como Dam water regulation improvement







Como Dam water regulation improvement

Valve Exhibit

Como Dam water regulation improvement

